

WHAT IS CLAIMED IS:

1. Method for printing coded marks on identification plates for cables and electrical equipment, said plates (2) being mutually connected by means of frangible portions (2a, 2b) to form a substantially planar card (3), presenting a surface to be printed (3b) opposite to a base surface (3a),

said method comprising the following phases:

approaching to the surface to be printed (3b) of said card (3) a ribbon shaped support (6) bearing at least a layer of ink;

heating the ribbon shaped support (6) and the plate (2) on at least one portion of the respective mutually approached surfaces to determine a transfer of the ink from the ribbon (6) to the plate (2).

2. Method as claimed in claim 1, further comprising the preliminary phase of coupling the card (3) to a support template (18) presenting a coupling side (18a) oriented towards the base surface (3a) of the card and a substantially planar base side (18b) oriented opposite to the coupling side (18a).

3. Method as claimed in claim 1, further comprising a preliminary phase of identifying the card (3) and enabling the heating phase once identification has taken place.

4. Method as claimed in claim 3, wherein the heating phase is enabled for a number of cycles equal to the number of cards comprised in a lot.

5. Method as claimed in claim 1, wherein the ribbon shaped support (6) presents at least one layer of ink uniformly distributed on at least one of its opposite surfaces, said heating phase being effected according to punctiform portions of the mutually approached surfaces of the ribbon (6) and of the card (3), by means of a print head (16) comprised in a peripheral printing unit (7) controlled by an electronic computer.

6. Method as claimed in claim 1, wherein the approach and heating phase are sequentially repeated at least two successive times, involving two different portions of the ribbon shaped support (6) bearing respectively different inks.

7. Method as claimed in claim 1, wherein the ribbon shaped support (6) is inked by means of a peripheral printing unit controlled by an electronic computer to reproduce on the support itself the coded marks to be printed on the plates (2), said heating phase being effected simultaneously and homogeneously on the entire transverse and/or longitudinal extension of the mutually approached surfaces of said ribbon shaped support (6) and of said card (3).

8. Apparatus for printing coded markings on identification plates for cables and electrical equipment, said plates (2) being mutually connected by means of frangible portions (2a, 2b) to form a substantially planar card (3), presenting a surface to be printed (3b) opposite to a base surface (3a), said apparatus comprising:

first means (8) for positioning said card (3);

second positioning means (9) operating on a ribbon shaped support (6) bearing at least a layer of ink on at least one of its surfaces to place the ribbon shaped support (6) in approached relationship to the surface to be printed (3b) of the card (3);

a heating unit (16) able to operate on the mutually approached surfaces of the ribbon shaped support (6) and of the card (3) to determine a transfer of the ink from the ribbon shaped support (6) to the card (3).

9. Apparatus as claimed in claim 8, wherein said card (3) is engaged to a support template (18) presenting a coupling side (18a) oriented towards the base surface (3a) of the card (3) itself and a substantially planar base side (18b).

10. Apparatus as claimed in claim 9, wherein said support template (18) presents housing seats (19) for respective engagement projections (5) protruding from the base surface (3a) of the card (3).

5 11. Apparatus as claimed in claim 9, wherein said card (3) and said support template (18) present an overall thickness that is equal to a passage clearance (L) defined by first positioning means (8), through which the card (3) is driven together with the support template
10 (18).

12. Apparatus as claimed in claim 8, further comprising sensor means (17a) to detect the presence of at least an identification seal (17) associated to said card (3) and enable the operation of the heating unit
15 (16) upon said detection.

13. Apparatus as claimed in claim 12, wherein said identification seal (17) is associated to a lot of cards (3), said sensor means (17a) being able to enable the operation of the heating unit (16) for the number of
20 work cycles equal to the number of cards (3) contained in said lot.

14. Apparatus as claimed in claim 8 wherein said heating unit comprises a print head (16) able to heat according to punctiform portions the mutually approached
25 surfaces of said ribbon shaped support (6) and of said card (3), said ribbon shaped support (6) presenting at least a layer of ink uniformly distributed on at least one of its surfaces.

15. Apparatus as claimed in claim 14 wherein said
30 first and second positioning means (8, 9) and said heating unit (16) are comprised in a peripheral printing unit (7) controlled by an electronic computer.

16. Apparatus as claimed in claim 14 wherein said ribbon shaped support (6) comprises at least two
35 superficial portions bearing respectively different inks, said second positioning means (9) being able to place

said superficial portions individually and selectively in positions approached to the surface to be printed (3b) of the card (3).

17. Apparatus as claimed in claim 15 wherein said
5 peripheral printing unit (7) is an ink sublimation printing unit usable to print credit cards.

18. Use of an ink sublimation printing unit, in particular of the type suitable for printing credit cards, to print coded marks on identification plates for
10 cables and electrical equipment.

19. Apparatus as claimed in claim 8, wherein said heating unit comprises a calendering unit comprising at least a heated roller able to act on said ribbon shaped support (6) coupled to the card (3).

15 20. Apparatus as claimed in claim 19, wherein said ribbon shaped support comprises at least one sheet bearing the coded marks to be printed on the plates.

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